**Models of the Universe**

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| Criterion | Strands |
| A – One World | Explain ways in which science is applied and used to address a specific problem or issue |
| Discuss the effectiveness of science and its application in solving the problem or issue |

Choose one of the following tasks:

1. In groups create models of how Ptolemy and Galileo viewed the universe. Then on your own write a summary explaining each model and include the following questions in your summary
   1. How do you think their philosophical beliefs affected their models of the universe?
   2. What observations or innovations led to the development of their models?
2. Write a short role-play in which Ptolemy and Galileo discuss their ideas. How would they support their version of the universe to each other?

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| Criterion A – One World | |  |
| Achievement Level | Descriptor | Task Specific |
| 0 | The student does not reach a standard described by any of the descriptors below. | You do not reach a standard described by any of the descriptors below. |
| 1-2 | The student is able to recall an example of a problem or issue that science can help, or has helped, to solve. The student makes some limited statement on how effective science was in solving the problem or issue. | You are able to recall both models of the universe and explain them in a limited way. You make some limited statement on how these two scientists understood the universe and what observations led them to their understanding. |
| 3-4 | The student is able to give an example of a problem or issue in our society that science can help, or has helped, to solve. The student is able to make some reasonably useful comment on the effectiveness of science in solving the problem or issue. | You are able to recall both models of the universe and explain them. You are able to make some useful comment on how these two scientists understood the universe and what observations led them to their understanding. |
| 5-6 | The student is able to give a well-explained example of a problem or issue in our society that science can help, or has helped, to solve. The student is able to make some sensible comments on the effectiveness of science in solving the problem of issue. | You are able to recall both models of the universe and explain them in depth. You are able to make sensible comments on how these two scientists’ understood the universe and what observations led them to their understanding. |